Constructors & destructors in C++:

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| --- | --- |
| 01  02  03  04  05  06  07  08  09  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29 | #include <iostream.h>  #include <conio.h>  // Class definition  class ConDes  {  public: // Acess specifier  int W1;  ConDes(int Pi); // Constructor  ~ConDes(); // Destructor  } GObj1(1),Gobj2(2);  ConDes::ConDes(int Pi)  {  cout<<"\n Beginning:"<<Pi<<"\n";  W1=Pi;  }  ConDes::~ConDes()  {  cout<<"Destructing:"<<W1;  cout<<"\n";  }  int main()  {  clrscr();  ConDes LocObj1(3);  cout<<"Karthikh Venkat - Students3k.com \n";  ConDes LocObj2(4);  getch();  return 0;  } |

**Output of this Program:**

Beginning: 1

Beginning: 2

Beginning: 3

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Beginning: 4

Destructing: 4

Destructing: 3

Destructing: 2

Destructing: 1

Note: Based on the computer system’s environment and compiler models the result will be varied.

Here you can find 3 simple and effective programs that describes about Constructors and destructors. 3 programs models are,

* With single parameter,
* With 2 arguments,
* Constructor & destructor program,

C++ Constructor with single parameter:

This program code is all about CPP constructor with a single parameter feature. Example code is given below.

|  |  |
| --- | --- |
| 01  02  03  04  05  06  07  08  09  10  11  12  13  14  15  16  17  18  19  20 | #include<iostream.h>  #include<conio.h>  //Class definition  class Ex  {  int i;  public:  Ex(int Janu) // Constructor  {  i= Janu;  }  int inpi() // Function definition  {  return i;  }  };  int main()  {  clrscr();  Ex O1=99; // passes 99 to Janu  cout<<O1.inpi();  getch();  return 0;  } |

Related: [Operator Overloading: C++ program for SET operations](http://students3k.com/operator-overloading-c-program-for-set-operations.html)

C++ Constructor with 2 parameters:

|  |  |
| --- | --- |
| 01  02  03  04  05  06  07  08  09  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25 | #include<iostream.h>  #include<conio.h>  // Class definition  class ConDes  {  int x, y;  public:  ConDes(int k, int a) //Constructor with parameters  {  x=k;  y=a;  }  void Display() // Method definition  {  cout<<x<<" "<<y;  }  };  int main()  {  clrscr();  ConDes O1(2,7);  O1.Display();  getch();  return 0;  } |

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| --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | |  | | --- | | C++ Constructors and destructors interview questions | | <<[Previous](http://careerride.com/Interview-Questions-C++-COM-ActiveX.aspx)  [Next](http://careerride.com/Interview-Questions-C++-Containers.aspx) >> [Part 1](http://careerride.com/C++-Interview-questions-Answer.aspx) | [Part 2](http://careerride.com/Interview-Questions-C++-Constructors-destructors.aspx) | [Part 3](http://careerride.com/Interview-Questions-C++-Access-Control.aspx) | [Part 4](http://careerride.com/Interview-Questions-C++-Virtual-functions.aspx) | [Part 5](http://careerride.com/Interview-Questions-C++-Inline-Function.aspx) | [Part 6](http://careerride.com/Interview-Questions-C++-Static-Data.aspx)[What is a constructor?](http://careerride.com/C++-what-is-a-constructor.aspx) **Latest answer:**Constructors allow initialization of objects at the time of their creation. Constructor function is a special function that is a member of the class and has same name as that of the class. An object’s constructor..............  [**Read answer**](http://careerride.com/C++-what-is-a-constructor.aspx) [What are destructors?](http://careerride.com/C++-what-are-destructors.aspx) **Latest answer:**Destructors are complements of constructors. When an object is destroyed, its destructor is automatically called. Destructors are mainly useful for doing the clean up job. E.g. an object may have..............  [**Read answer**](http://careerride.com/C++-what-are-destructors.aspx) [What are the restrictions apply to constructors and destructors?](http://careerride.com/C++-restrictions-to-constructors-and-destructors.aspx) **Latest answer:**The following restrictions apply to constructors and destructors  Constructors and destructors don't return values.  The addresses of constructors and destructors can't be taken so we can't use references and pointers on them...............  [**Read answer**](http://careerride.com/C++-restrictions-to-constructors-and-destructors.aspx) [Explain the order in which constructors are called when an object of a derived class is created.](http://careerride.com/C++-order-in-which-constructors-are-called.aspx) **Latest answer:**The constructors of any virtual base classes are called first in the order of inheritance...............  [**Read answer**](http://careerride.com/C++-order-in-which-constructors-are-called.aspx) [What is the difference between a copy constructor and an assignment operator?](http://careerride.com/C++-copy-constructor-vs-assignment-operator.aspx) **Latest answer:**A copy constructor is used to declare and initialize an object from another object. ..............  [**Read answer**](http://careerride.com/C++-copy-constructor-vs-assignment-operator.aspx) [What is a virtual destructor? Explain the use of it.](http://careerride.com/C++-what-is-a-virtual-destructor.aspx) **Latest answer:**If the destructor in the base class is not made virtual, then an object that might have been declared of type base class and instance of child class would simply call the base class destructor without calling the derived class destructor...............  [**Read answer**](http://careerride.com/C++-what-is-a-virtual-destructor.aspx) [How should a contructor handle a failure?](http://careerride.com/C++-how-contructor-handle-a-failure.aspx) **Latest answer:**Constructors don't have a return type, so it's not possible to use return codes. The best way to signal..............  [**Read answer**](http://careerride.com/C++-how-contructor-handle-a-failure.aspx) [What are shallow and deep copy?](http://careerride.com/C++-what-are-shallow-and-deep-copy.aspx) **Latest answer:**A shallow copy just copies the values of the data as they are. Even if there is a pointer that points to dynamically allocated memory, the pointer in the copy will point to the same dynamically allocated..............  [**Read answer**](http://careerride.com/C++-what-are-shallow-and-deep-copy.aspx) [What is virtual constructors/destructors?](http://careerride.com/C++-what-is-virtual-constructors-destructors.aspx) **Latest answer:**The explicit destroying of object with the use of delete operator to a base class pointer to the object is performed by the destructor of the base-class is invoked on that object................ [**Read answer**](http://careerride.com/C++-what-is-virtual-constructors-destructors.aspx) <<[Previous](http://careerride.com/Interview-Questions-C++-COM-ActiveX.aspx)  [Next](http://careerride.com/Interview-Questions-C++-Containers.aspx)>> | | |